ABSTRACT OF THE DISCLOSURE

Provided herein are data structures, processes and systems to facilitate scheduling of complex work orders to a mobile workforce. Complex work orders are comprised of several distinct sub-orders that require coordinated scheduling because the start of one sub-order is dependent on the start or completion of another. The data structure provided herein identifies a set of member sub-orders required for completing complex work orders and relates those sub-orders to one another by precedence criteria that establish which sub-orders are dependent on which other sub-orders. This data structure is used in computer processes integrated with workforce management systems to permit such systems to schedule and/or assign individual work orders in a coordinated manner to satisfy the precedence criteria. Also provided are processes for validating the completion of predecessor sub-orders prior to starting successor sub-orders and transmitting warning messages to field technicians when the precedence criteria have not been satisfied.